



1331 17<sup>th</sup> Street, Suite 1100  
Denver, Colorado 80202  
Tel: 303.295.1237  
Fax: 303.295.1895

August 27, 2007

Mr. Paul Peronard  
Libby Asbestos Site Team Leader  
U.S. Environmental Protection Agency  
Region VIII, Mail Code (8EPR-SR)  
1595 Wynkoop Street  
Denver, Colorado 80202-1129

Ms. Katherine Hernandez  
Remedial Project Manager  
U.S. Environmental Protection Agency  
Region VIII, Mail Code (8EPR-SR)  
1595 Wynkoop Street  
Denver, Colorado 80202-1129

Mr. Mark Raney  
U.S. Department of Transportation  
Research and Innovative Technology Administration  
John A. Volpe Center National Transportation Systems Center  
Environmental Engineering Division, RTV-4E  
55 Broadway, Kendall Square  
Cambridge, Massachusetts 02142

Subject: Final Data Gap Analysis, Former Export Plant, Operable Unit 1

Dear Mr. Peronard, Ms. Hernandez, and Mr. Raney,

The purpose of this letter is to present data gaps between investigations already conducted and information needed to support a risk assessment and remedial investigation (RI) specific to the former export plant, Operable Unit (OU) 1. The data gaps were determined by reviewing all existing data for the site as presented in the Data Summary Report (DSR) for OU1 and comparing the data set to the draft final conceptual site model (CSM), Figure 1. It is recommended that the data gaps identified and discussed be addressed as part of completing the risk assessment and RI for OU1.

The CSM for OU1 (Figure 1) identifies several potential exposure pathways resulting in five contaminated media of concern:

- Indoor air
- Dust in air of vehicles
- Outdoor air near disturbed soil
- General ambient outdoor air
- Dust in air near disturbances of roofing or other outdoor surfaces

This memorandum is organized to identify data gaps by the five media of concern.

### **Indoor Air**

Data is currently not available to evaluate potential exposures from indoor ambient air at the site. The only existing building at this site is the David Thompson Search and Rescue support building constructed in 2004. This building does not contain vermiculite insulation. Stationary air samples have not proven to be a reliable tool for estimating air as an exposure pathway in homes or commercial buildings in Libby. As a result, there is no recommendation for the collection indoor stationary air samples. Instead indoor ABS is recommended to complete the data gap related to potential indoor air exposures.

As stated above, only one building remains at the site, the David Thompson Search and Rescue support building. It is believed that the activities conducted by search and rescue personnel cause them to cross most, if not all OU boundaries, for the Libby Asbestos Superfund Site. Therefore any Libby amphibole asbestos (LA) found indoors is likely not directly related to surficial soil contamination at OU1. Any indoor exposures in the search and rescue building are specific enough to the buildings and its users that indoor ABS is recommended. The collection of data to fill this potential data gap should consist of indoor ABS conducted during two activity types, passive and active each conducted three times on consecutive days alternating between mornings and evenings as described in the Indoor ABS SAP (SRC and CDM 2007). Data from the currently on-going ABS program can be evaluated to determine if seasonal variations in indoor exposures are possible. If this is determined to be true, additional ABS scenarios can be implemented. The minimum data types that would be collected to support this gap are summarized below:

- **Soil** – results of the six soil sampling locations described later in this summary can be used to support indoor ABS.
- **Personal Air** – one high volume and one low volume (backup/archive) personal air sample will be collected for each activity (passive and active)
- **Dust** – one 10-point composite dust sample will be collected from the building

- **Other Data** – in support of ABS, meteorological data will also be needed to assist with any data interpretation. This information will be collected from the existing NOAA weather station in Libby.

## **Dust in Air of Vehicles**

Air in vehicles has not been evaluated specific to potential exposures at OU1. It is therefore recommended that an ABS type sampling activity be designed to collect personal air samples specific to this pathway in conjunction with studies related to other operable units.

## **Outdoor Air Near Disturbed Soil**

Information from the current outdoor ABS investigation can be used to assess potential exposure from this pathway at OU1. To determine the appropriate data set that is most relevant, soil sampling should be conducted in the following areas (Figure 2):

- Flat area of the export plant
- Slopes of Highway 37 shoulder south of City Service Road
- Slopes of Highway 37 shoulder north of City Service Road
- Slopes of Highway 37 shoulder north of West Thomas Street
- Slopes of Highway 37 shoulder south of West Thomas Street
- Riverside Park

One soil sample will be collected from each of the 6 areas according to CDM-LIBBY-05 with a sample aliquot from each point inspection (PI) location. Current surface soil should be assessed using current visual estimation techniques, CDM-LIBBY-06 on a 100 by 100 foot grid in the area of the former export plant and Riverside Park. This equates to one point inspection (PI) for every 10,000 square feet. In the area of the Highway 37 shoulders the PIs will be increased to a density of one every 5,000 square feet equating to approximately a 70 by 70 foot grid.

Once soil results and visual estimation PI results are available, the characteristics of the property will be compared to the current outdoor ABS property classification to determine which set of ABS data can be used to evaluate this potential exposure pathway at OU1. In addition, previous data collected by the Montana Department of Transportation for department workers along the shoulders of Highway 37 North will assist in the evaluation of the shoulder areas of Highway 37 adjacent to OU1.

In addition, samples will be collected from the 0 to 12-inch below ground surface interval to determine if any potential LA contamination exists in areas previously

backfilled. Due to activities conducted at the site since the initial removal actions, vermiculite containing soil (VCS) may still be present at the site. This is due to several reasons:

- 1) Visible vermiculite in low levels was not a clean-up trigger at the time the removals were conducted
- 2) Work conducted by the city may have introduced vermiculite to the site over time (e.g., stockpiling of street sweepings)
- 3) Work conducted by the city (e.g., installation of a water pipeline), utility companies (e.g., phone cable installation), and their subcontractors, has caused VCS previously existing in the subsurface to have been brought to the surface during excavation activities

Soil sampling and visual estimation will be performed to determine if additional removal actions are required at the site.

### **General Outdoor Ambient Air**

Information from the current outdoor ambient air program, initiated in October 2006 and scheduled to be completed in October 2007, will fill the data gap for determining outdoor ambient air exposures. Therefore, additional sample collection is not recommended specific to this data gap.

### **Dust in Air Near Disturbances of Roofing or Other Outdoor Surfaces**

Air near disturbances of roofing or other outdoor surface has not been completed specific to OU1. It is therefore recommended that an ABS type sampling activity be designed to collect personal air samples specific to this pathway in conjunction with studies related to other operable units.

Very truly yours,



Dee Warren  
CDM Federal Programs Corporation

Cc: Courtney Zamora, Volpe Center Site Manager  
Anni Autio, CDM Processing Area Task Order Manager  
CDM Project Files

DRAFT FINAL

FIGURE 1. CONCEPTUAL SITE MODEL FOR INHALATION EXPOSURES TO ASBESTOS  
Libby Superfund Site – Operable Unit 1 (Former Export Plant)





